

PN GENERATORS FOR SPREAD SPECTRUM COMMUNICATIONS SYSTEMS

ABSTRACT

Techniques to improve the acquisition process in a spread spectrum environment. The signals from different CDMA systems are spread with different sets of PN sequences, with the PN sequences in each set being uncorrelated to the PN sequences in the other sets. The mobile station can attempt to acquire the pilot signal by processing the received signal with a first set of PN sequences corresponding to a first hypothesis of the particular signal being acquired. If acquisition of the pilot signal fails, a second set of PN sequences corresponding to a second hypothesis is selected and used to process the received signal. The PN sequences in the second set are uncorrelated to the PN sequences in the first set.